

which is required by USPTO practice, see MPEP Chapters 2307.02 and 804. If the REQUEST is granted, it is respectfully requested that the instant amendment be entered and considered, pursuant to 37 C.F.R. 1.111, rather than 37 C.F.R. 1.116.

Claims 1-72 are pending in the present application and, for the reasons set forth below, are believed to be in condition for allowance. It is requested, pursuant to MPEP Chapters 2306 and 2307, that if the Examiner finds **at least one of copied claims 31-36 (i.e., claims 1-5 and 7 from USP 5,943,593) allowable**, then the Examiner proceed immediately to consult with the TC 2800 Interference Specialist and begin the preparation of the necessary paperwork to declare an interference between the instant application and the '593 patent.

A. Non-Statutory Double Patenting Rejection

The Examiner provisionally rejects claims 1, 10 and 31 under the judicially created doctrine of double patenting as unpatentable over claims 1, 8, 17 and 24 of copending Application Serial No. 09/615,842.

Applicants again respectfully traverse this rejection by asserting that the rejected claims define subject matter which is clearly patentably distinct over claims 1, 8, 17 and 24 of the '842 application. More particularly, it is contended that the aforementioned claims of the '842 application fail to expressly teach or remotely suggest a method of fabricating a semiconductor device involving a step of irradiating a semiconductor film with a laser light along a scan direction which is parallel to a channel region. Accordingly, double patenting cannot be supported in claims 1, 8, 17 and 24 of the '842 application. Reconsideration and withdrawal of the rejection is earnestly solicited.

It is particularly noted that the Examiner has not responded to this traversal in the May 24, 2002 final Office Action. If the Examiner maintains this rejection, it is requested that the Examiner specifically point out where in the teachings of claims 1, 8, 17 and 24 of the '842 application "parallel" scanning is taught or suggested. Further, if

such a rejection is maintained with regard to copied patent claim 31, then it is also requested that the TC 2800 Director's approval (signature) be indicated, as is required by MPEP Chapter 804(II)(B)(2).

B. 35 U.S.C. §103 Rejection

The Office Action contains the following rejections under §103:

Claims 1, 2, 6, 8, 10-13, 17, 19, 31-35, 37, 38, 41, 42, 44, 46-49, 52, 53, 55, 58-60, 63, 64, and 66-71 under 35 U.S.C. §103(a) as unpatentable over *Chae*,

Claims 20-24, 28, 29 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,432,122 to *Chae* in view of U.S. Patent No. 5,565,377 to *Weiner et al.* (Hereinafter "*Weiner*"),

(repeats rejection again) Claims 20-24, 28, 29 (adds claims 43, 45, 54, 56-57, 65, 72) under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,432,122 to *Chae* in view of U.S. Patent No. 5,565,377 to *Weiner et al.*, and

Claims 3-5, 7, 9, 14-16, 25-27, 30, 36, 39, 40, 50, 51, 61 and 62 under 35 U.S.C. §103(a) over *Chae* in view of U.S. Patent No. 4,915,772 to *Fehlner et al.* (Hereinafter "*Fehlner*").

Applicants respectfully traverse these grounds for rejection for at least the following reasons.

With regard to §103(a) rejection of at least copied patent claims 31-35 (from claims 1-5 and 7 of USP 5,943,593 to Noguchi et al, hereinafter "Noguchi"), the Applicants note that the reference to Chae (USP 5,432,122) had already been considered by the USPTO during the examination of the Noguchi, and that claims 1-5 and 7 of Noguchi (current copied claims 31-36) had been found to be patentable under 35 U.S.C. §101, §102, and §103 over Chae alone or in combination with any of the other prior art cited in Noguchi. Consequently, the USPTO is precluded, pursuant to the holding of *In re Portola Packaging, Inc.*, 110 F 3d 786, 42 USPQ 2d 1295 (Fed Cir 1997) which is

discussed at length in MPEP Chapters 2242, 2244, 2246 and 2258, from reexamining the claims 31-35 relying upon the Chae reference solely. The USPTO appears to be improperly attempting to make an end run around the estoppel created by *In re Portola* by raising the unpatentability issue over the Chae reference in the instant proceeding knowing full well that the USPTO is prevented from raising this same issue in a Commissioner ordered reexamination relying solely upon the Chae reference. Such an approach is unsupported by statute or case law, and the rejection of claims 31-35 must be withdrawn.

Turning to the merits of the §103(a) rejections of claims 1-30, 31-35 and 36-72, over Chae alone or in combination with Weiner or Fehlner, the Applicants respectfully contend that Chae, alone or in combination with the Weiner or Fehlner, fails to expressly teach or implicitly suggest each and every claim limitation necessary to support a finding of prima facie obviousness under §103. Specifically, the Examiner asserts that Chae discloses a method of fabricating a semiconductor device including the forming and irradiating steps presently set forth in the claimed invention. The Examiner concedes, however, that Chae fails to disclose irradiating an amorphous film with a laser light along a scan direction which is parallel to the channel direction; while also admitting that the Applicants' specification, e.g., Figures 2 and 7, supports such a limitation in the present claims.

Therefore, the Examiner maintains (without providing any documentary evidence in support of this conclusion or any suggestion/motivation why Chae could be modified to perform "parallel" scanning relative to the channel region) that it would have been obvious to one of ordinary skill in the art at the time of invention to perform irradiation parallel to the channel region since "there is no difference in quality or properties of the crystallized film," see page 4 of the Office Action. Finally, the Examiner attempts (in the Response to Arguments section of the Office Action) to solidify this holding with the

assertion that since one of ordinary skill in the art would discern no difference between scanning in either the parallel or orthogonal directions and since the no “new and unexpected results” have been established by the Applicants then scanning in either direction would be obvious to one of ordinary skill in the prior art.

Applicants traverse this holding by the Examiner since not only does this position fail to set forth any reason/motivation for Chae (other than the possibility for “parallel” scanning to exist in the process of Chae) to select “parallel” scanning as claimed, but there already is evidence in the current application record that supports that Applicants’ assertion that “parallel” scanning relative to the channel region provides advantages over the “orthogonal” scanning. Further, such evidence has already been accepted by the USPTO in determining the patentability of this feature. That evidence is provided by the Noguchi et al reference (USP 5,943,593) cited in the original Information Disclosure Statement of August 7, 2000. Specifically, Noguchi (Figures 2B, 2C, 3; column 6, lines 52-68; column 7, lines 13-24) clearly teaches that orthogonal scanning relative to the gate (and parallel to the channel region as shown in Figure 2B) would yield the unexpected advantage of smaller ON currents when compared to parallel scanning relative to the gate (and orthogonal to the channel region as shown in Figure 2C). Noguchi goes on to show (see Figures 4-8; column 7, lines 25-65; column 8, lines 1-11) that scanning in a direction orthogonal to the gate (and parallel to the channel region) provides other advantages, e.g., enhanced carrier mobility, over parallel scanning relative to the gate (and orthogonal to channel region).

Therefore, in light of these teachings, the Applicants would assert that there is a difference in the formation of thin film transistors when the energy beam scanning is performed parallel to the channel region (as in the presently claimed invention) versus orthogonally scanning relative to the channel region. Therefore, since the Examiner has provided no evidence or rationale of record to mitigate these teachings of Noguchi, and

inasmuch as Chae fails to expressly teach or remotely suggest each and every feature defined by the claims of the subject application, i.e., scanning "parallel to . . . channel region," or provide any suggestion or motivation to modify its teachings, the rejection of claims 1, 2, 6, 8, 10-13, 17, 19, 31-35, 37, 38, 41, 42, 44, 46-49, 52, 53, 55, 58-60, 63, 64, and 66-71 under 35 U.S.C. §103(a) as unpatentable over Chae has been made in error and must be withdrawn.

Finally, the teachings of Weiner or Fehlner do not remedy the deficiencies noted above for the Chae reference. That is, neither reference teaches or suggests forming a thin film transistor wherein the conversion of the semiconductor material from amorphous to (poly)crystalline form occurs by parallel scanning, with an energy beam, relative to the channel region of the transistor. Therefore, the combination of Chae with either of Weiner or Fehlner would still fail to render the claimed invention obvious in that either combination would also fail to teach scanning an energy beam in a direction parallel to the channel region. Accordingly, Applicant respectfully requests that the §103(a) rejection of the claims 3-5, 7, 9, 14-16, 20-24, 25-29, 30, 36, 39, 40, 43, 45, 50, 51, 54, 56-57, 61, 62, 65 and 72 also be withdrawn.

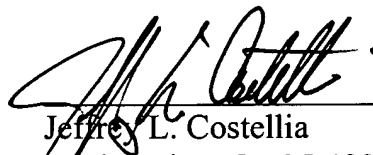
Conclusion

It is believed that the present application is now in condition for allowance. However, should the Examiner find some issue to remain unresolved, or should any new issue arise, which could be eliminated through discussions with the applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Lastly, it is noted that a separate Petition for Extension of Time (one month) accompanies this response along with a check in payment of the requisite extension of time fee. However, should that petition become separated from this Amendment, then

this Amendment should be construed as containing such a petition. Likewise, any overage or shortage in the required payment should be applied to Deposit Account No. 19-2380 (740756-2100).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey L. Costellia", is written over a horizontal line.

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